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Variations in the Economic Well-Being of Divorced Women and Their Children

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In this paper we investigate variations in the economic well-being of ever-divorced or currently separated mothers with children from an absent father -- a quickly growing and disportionately poor segment of the population. In large measure, the economic well-being of a divorced mother depends upon the amount of family support (child support and alimony) she receives from her ex-husband, her labor force participation, and how quickly she remarries, if at all. One unique aspect of our study is that we pay particular attention to the effects of child support and alimony upon the probabilities of remarriage and labor force participation. The data set used in our analysis is the March-April 1979 Match File of the Current Population Survey (CPS).

Within the limitations imposed by our data, we find the likelihood of being awarded child support depends upon the needs of the mother and her children, and upon the absent father's long-term ability to pay. In contrast, the likelihood of receiving child support due depends less upon the circumstances of the woman, and more upon the current financial well-being of her ex-husband. His income is found to affect whether or not any child support is actually paid, but not how much is paid. Like other forms of nonlabor income, child support payments are found to lower the probability of remarriage. But unlike other forms of nonlabor income, child support payments are found to raise labor force participation.



I. Introduction

Female-headed families are a large and growing proportion of all families. Special concern for this population stems from the limited amount of resources available to the family unit. Divorce almost always results in a decline in the level of living for all parties involved, but the decline is larger for women than for men (Hoffman, 1979). Female-headed families make up a disproportionate share of the poverty population and many have little choice but to rely upon the welfare system (Bradbury, et al., 1979).

Between 1970 and 1981 the number of married-couple families increased only 10.1 percent while the number of female-headed families increased 62.4 percent, so that by 1981 over 15 percent of all families were headed by a woman only. This rising rate of female headship is of special concern in part because female-headed families have lower incomes and are more likely to be classified as poor than married-couple families. In 1980, the median income of married-couple families was \$23,180 compared to \$10,830 for female-headed families. Of the 6.2 million families with incomes below the poverty level in that year, almost 3 million were female-headed, 3 a phenomenon recently dubbed the "feminization of poverty." Female headship also may be of special concern because of the large number of children involved. Between 1970 and 1980 the number of children living with two parents (not necessarily their natural ones) declined 20.6 percent, while the number living with one parent (overwhelmingly their mother) increased 67.1 percent. By 1982, 15.3 percent of white and 47.2 percent of black children lived with only their mothers. 5 For most this is a temporary arrangement, since a large majority of divorced women remarry. However, it has been estimated that "children born in the mid-1970's have about 45 chances in 100 of living in a one-parent family for a period of at least several months before they reach the age of 18 years."6

Most mothers with children from an absent father head their own families at

least for a time. Figure 1 shows the distribution by household status in April 1979 of mothers aged 18 and over with children (under 21 years of age) from an absent father. Of these 6.4 million mothers, 5.5 million had previously been married to the child's father, while 0.9 million had not. Among the evermarried, 3.5 million are divorced or separated: 3.2 million of these head their own families and 0.3 million live as subfamilies with parents or other relatives. Another 2.0 million are remarried and 54 thousand are widowed after remarriage. Among the never-married, most head their own families. In this paper, we focus on the two largest of these groups, divorced or separated mothers heading their own families and remarried mothers, excluding the widowed.

We investigate variations in several key components of the economic well-being of ever-divorced or currently separated mothers with children from an absent father. In large measure, the economic well-being of a divorced mother depends upon the amount of family support (child support and alimony) she receives from her ex-husband, her labor force participation, and how quickly she remarries, if at all. Whether family support is received or not and how much is received is subject to considerable uncertainty, both in amount and regularity of payments. Because many divorced mothers are awarded child support while few are awarded alimony, we shall devote much more attention to the former. A divorced mother is more likely to participate in the labor force than a married mother, since her earnings become crucial to the family's economic status. She also can seek to improve the position of her family by searching for a new mate to regain the economic well-being lost by divorce. One unique aspect of our study is that we pay particular attention to the effects of child support and alimony upon the probabilities of remarriage and labor force participation.

Figure 1 also presents four measures of well-being for each household

status group: average total family income; the percentage of families in poverty; the percentage of families receiving child support; and the labor force participation rate of mothers. In terms of economic status, ever-married are better off than never-married mothers, and remarriage clearly improves economic status. While the total family income of divorced (or separated) mothers is only \$9678 and 36.2 percent of them live in poverty, family income of remarried mothers is \$23,044 and only 5.6 percent of them live in poverty. The low economic position of currently divorced compared to remarried mothers occurs despite a higher proportion of them receiving child support (43.9 compared to 39.0 percent) and participating in the labor force (73.3 compared to 60.6 percent). These figures portray strong economic incentives for divorced mothers to remarry.

The data set upon which these population estimates are based and from which our sample is drawn is the March/April 1979 Match File of the Current Population Survey (CPS). Data on marital status, divorce history and child support and alimony were collected on all women 18 years of age and older in a special supplement to the April 1979 CPS. A file was created containing these data along with the income information from the March 1979 CPS. This file contains 1579 currently divorced or separated female family heads and 1005 remarried mothers. Population estimates for all mothers eligible for child support and alimony as well as descriptive analyses of them are presented in U.S. Bureau of the Census (1981).9

A divorced mother will be better off if she is awarded and receives child support, if she participates in the labor force and/or if she remarries. Women who are awarded child support are better off than those who are not, and their income is higher by more than the amount of child support received. In our sample, the total personal income in 1978 of women awarded child support was

\$7970 of which child support comprised \$1115. For those not awarded child support, total personal income was \$5568. The difference is even greater between those who received child support and those who did not. Total personal income of those who received child support in 1978 was \$9425 while for those who did not it was \$5742. The average amount of child support received for those who received any was \$1901, much less than the difference in income. Women who participate in the labor market have higher personal income and receive more child support than those who do not. In 1978, the average personal income of currently divorced or separated mothers who worked outside the home was \$9,632 while for those who did not it was \$4197; if they worked, they received \$998 in child support but if they did not, only \$570. As shown in Figure 1 above, although remarriage improves the economic well-being of divorced mothers the most, it appears to be associated with less child support received, \$1683 compared to \$2021 for currently divorced or separated mothers.

An important question raised by these figures is whether child support payments have a direct causal effect upon the decision to work and/or remarry, or whether the observed association is simply simultaneously determined by other factors? To examine the interrelationships between child support and these other components of economic well-being, we postulate the theoretical model presented in Section II. Based upon that model, we examine what factors influence the award and receipt of child support in Section III. Then, we examine the impact of child support payments (holding constant other factors) upon remarriage in Section IV and upon labor force participation in Section V.

II. Theoretical Framework

Before turning to our empirical work, we offer a short sketch of the theory upon which our analysis is based. We posit the following recursive system:

$$CSDUE = f^{1}(H^{1}, W^{1}, L^{1})$$

$$(1)$$

$$CSREC = f^{2}(H^{2}, W^{2}, L^{2}, CSDUE)$$
 (2)

$$RM = g[Y_d (CSREC_d, ...), Y_r (CSREC_r, ...), C]$$
(3)

$$LF_{d} = \kappa[W_{h}(CSREC_{d},...), W_{m}, V_{d}(CSREC_{d},...)]$$
(4)

The first equation says that child support due (CSDUE) is a function of a vector of characteristics of the ex-husband's ability (and desire) to pay (H^{1}) , the financial needs of the woman and children (W^{1}) and the legal environment at divorce (L^{1}) . The second equation says that support actually received (CSREC) depends upon the same three vectors of variables $(H^2, W^2,$ and L^2) as well as upon the amount of support due. We label these vectors with different superscripts to suggest that they may contain somewhat different elements from those in the first equation. For example, W^{1} may measure the judge's perception of the woman's needs, while W² measures the ex-husband's perception of her needs. A priori W² could depend in part upon the woman's current marital status (RM), but in our empirical work we offer evidence that this effect is limited, Past work (Gordon, Jones and Sawhill, 1978; Cassetty, 1978) finds that the effect of H^2 upon CSREC is particularly strong, where ${
m H}^2$ refers to the absent father's current financial status, measured perhaps by his current income or current employment status. L^2 includes child support enforcement laws which vary from state to state.

Equation 3 states that the probability a divorced woman remarries (RM) depends negatively upon her real income (monetary plus nonmonetary) while divorced $(Y_{\rm d})$, positively upon her expected real income if remarried $(Y_{\rm r})$, and negatively upon the costs of marital search (C). Since child support payments are supposed to continue even after a woman remarries, CSREC enters both $Y_{\rm d}$ and $Y_{\rm r}$, although a priori we allow expected receipts to vary with

marital status (CSREC $_{\rm d}$ and CSREC $_{\rm r}$). Ceteris paribus, an increase in child support payments will reduce the expected increase in income from remarriage (because, although portable, child support payments are a larger fraction of $^{\rm Y}_{\rm d}$ than of $^{\rm Y}_{\rm r}$), but will raise the woman's attractiveness to potential marriage partners. Therefore, the net impact of child support on remarriage is ambiguous. It should be noted that public assistance benefits may be another important component of $^{\rm Y}_{\rm d}$.

The final equation states that the probability a divorced woman is in the labor force (LF $_{\rm d}$) depends negatively upon the value of her time at home (W $_{\rm h}$), positively upon the value of her time in the market (W $_{\rm m}$), and negatively upon nonlabor income (V $_{\rm d}$), which itself depends upon child support payments (CSREC $_{\rm d}$). If a woman uses child support payments to purchase for her children market goods which can be substituted for her home time, then W $_{\rm h}$ may depend negatively upon CSREC $_{\rm d}$. In this case, the net effect of an increase in CSREC $_{\rm d}$ on LF $_{\rm d}$ is ambiguous: it raises V $_{\rm d}$ which reduces LF $_{\rm d}$, but it lowers W $_{\rm h}$ which raises LF $_{\rm d}$.

To summarize, economic theory cannot determine the net impact of child support payments on either the probability of remarriage or the probability of labor force participation. Instead, this remains to be determined by empirical analysis.

III. Empirical Analysis of Child Support

Child support payments are in many cases an uncertain and inadequate source of income to divorced mothers. In this section, we examine what factors determine whether a woman is awarded child support, and then given its award whether she actually receives it, as well as how much she receives. Our study significantly improves upon previous studies of child support (Cassetty, 1978; Gordon, Jones and Sawhill, 1978; and Sorensen and MacDonald, 1981)

by separating the question of award from receipt and by use of a large national data set sampling the entire eligible population.

Excluding observations with missing values, our sample consists of up to 2416 ever-divorced or currently separated women (18 years of age or over) with children (under 21 years of age) from an absent father. There are 389 black women and 2027 nonblacks, of which 7 percent are of Spanish origin. At divorce or separation, 72.6 percent of these women were awarded child support--77.5 percent of nonblacks and 47.6 percent of blacks. ¹⁰ For those who were due payment in 1978 the average amount due annually was \$2028. ¹¹ Of these, 71.4 percent received partial or full payments averaging \$1899. While the large majority of those due support received at least partial payment, 45.4 percent reported receiving no payments or irregular payments. Means and standard deviations for various characteristics of this sample are summarized in the Appendix, Table A-1.

In this section, we estimate determinants of the award and receipt of child support for currently divorced or separated and remarried women together. ¹² Because black women are much less likely than nonblack women to be awarded child support, we estimate the determinants of award probability separately by race. However, in analyzing the receipt of child support, we combine blacks and nonblacks because too few blacks are awarded child support to justify separate analysis. ¹³ The variables used in the regression equations are defined in the Appendix, Table A-2.

Determinants of the Probability of Being Awarded Child Support

Child support awards may be either court-ordered or informally agreed to, although even most voluntary agreements are formalized through legal contracts. Our theoretical analysis postulates that child support is more likely to be awarded the greater is the perceived need of the woman and children, and the

greater is the ability (or desire) of the absent father to pay. The probability of award also depends upon the legal environment at divorce which varies from state to state and over time, and may vary within a state across legal jurisdictions, as well as across individual judges. There is some evidence that in states with no-fault divorce laws, the amount of child support awarded is lower than in states without no-fault divorce (Peters, 1982). For our sample we have only some of the information that would be desirable on the needs of the mother and on the ability of the father to pay, and no information on the legal environment. 14

Let P be the probability that child support is agreed to or awarded conditional upon a woman being ever-divorced or currently separated. Then the logistic function

$$P = 1/(1 + e^{-\beta X - U})$$
 (5)

was estimated by maximum likelihood methods, where X is a vector of independent variables and β a vector of coefficients to be estimated. Table 1 presents the estimated partial derivatives of P with respect to each variable, found by multiplying the estimated β 's by $\overline{P}(1-\overline{P})$, where \overline{P} is the mean of the dependent variable.

Variables which may reflect the new family's financial need include the mother's age at divorce (AGEDIV), education (EDUC and COLLGRAD), number of children by the absent father (PATERNR) and age of the children (KID6T017). While no direct information is available on the father's financial status at the time of divorce, his ex-wife's age (at divorce) and education will be positively correlated with his own and, consequently, with his ability to pay. Another proxy for his ability to pay is the value of the property settlement reached in the divorce proceedings (SETVAL). Finally, geographic location variables (NEAST, NCENTR, SOUTH, SMSA, and CC) may control for some of the

variation in the legal environment that we are unable to capture.

It is important to distinguish divorced from separated (SEP) women in our sample. Fourteen percent of the nonblacks are currently separated, while 48 percent of the blacks are separated. Separated women may, but are less likely to, be awarded child support. According to our estimates, ceteris paribus, separated nonblack (black) women are 21 (29) percent less likely than comparable divorced women to have been awarded child support.

For nonblacks, the probability of being awarded child support increases as the number of dependent children increases (PATERNR), by 4.1 to 4.7 percent per child, and as one or more of these children tends to be older (KID6T017). For the black sample, however, neither variable is significant.

EDUC is positive for both groups but significant only for nonblacks. In addition, the dummy variable COLLGRAD is negative and significant for non-blacks, suggesting that college educated women are between 2.5 and 5.0 percent less likely than otherwise similar high school graduates to be awarded child support. As noted above, EDUC may serve both as a proxy for ex-husband's lifetime earnings potential and as a measure of the new family's financial needs. Although more education may enable a woman to support the children by herself, thereby reducing needs, it also raises the standard of living to which the family is accustomed, thereby increasing needs. The positive sign on EDUC may reflect both this second effect as well as her ex-husband's ability to pay, while the negative coefficient on COLLGRAD may reflect the competing effect of a lower need for support.

The coefficient on the woman's age at divorce (AGEDIV) is positive for both races and significant for blacks. In part, her age is again a proxy for her ex-husband's ability to provide support. (It appears to be a better proxy

for income of black ex-husbands than is her education.) But in addition, the variable is strongly positively correlated with the duration of the marriage. Longer marriages may be more likely to result in child support awards for several reasons. Chief among them is that the father is likely to be more attached to his children and therefore more disposed toward providing them support. A longer duration of marriage might also suggest that the woman has invested more in this marriage, developing greater marriage-specific capital (Becker, Landes and Michael, 1977) and specialized more in home activities, developing less human capital valued in the market. Thus, she would be less able to support the children.

In neither racial sample of ever-divorced women is the dummy variable on current marital status (REMAR) significant. This result is important, since it suggests that women who have remarried do not possess some unobserved traits that make them systematically more or less likely to be awarded child support at the time of their divorce.

For a slightly smaller sample of women, we were able to include an index of the value of property settlements (SETVAL) as a proxy variable for the financial well-being of the couple before divorce. Since property settlements and child support awards are determined together, the coefficient on SETVAL may be biased if any unobservable factors which affect the value of property settlements also affect the probability of being awarded child support. To the extent that SETVAL is a good proxy, its significant positive coefficient for both racial groups reinforces the hypothesis that father's ability to pay (and the original family's standard of living) is a strong determinant of child support awards. Note that the inclusion of SETVAL reduces the coefficients on EDUC and AGEDIV, also proxies for father's ability to pay.

For the sample of all women both awarded child support and expecting to receive it in 1978, we estimated equations on factors determining the amount due (results not shown). With a few notable exceptions, factors that determine whether or not child support is awarded also affect the amount due. Few child support awards are automatically indexed to the rising price level (Krause, 1981, p. 24) and most are infrequently renegotiated; thus, we controlled for the number of years since the divorce (YEARSDIV) and found its coefficient to be negative and significant. We also introduced as an explanatory variable the woman's estimate of her ex-husband's current income (HUSINC); this considerably reduces the sample size because many women do not know HUSINC. 16 While the results from this smaller sample may be biased because of this self-selection, the means of the independent variables (reported in Table A-1) changed very little. We found the coefficient on HUSINC positive and significant, suggesting that each additional \$5000 in the absent father's 1978 income raises child support due by \$219. The coefficient on EDUC declines in size, but remains significant, suggesting that EDUC stands for more than just his current ability to pay. We have argued that it serves as a proxy for his lifetime earnings potential upon which the support award is likely to be based. It may also indicate a higher standard of living to which the family is accustomed.

Determinants of the Probability of Receiving Child Support and of the Amount Received

Not all women due child support actually receive it. Of those expecting payment in 1978, only 71.4 percent received any. Moreover, those who receive it frequently receive less than what is due. Among women receiving some support, the mean receipt was \$1899 out of the \$2204 due them, around 86 percent. In this section we offer some evidence that the probability of actually receiving child support, unlike its award, depends less upon the needs

of the woman, and more upon the current financial status of her ex-husband.

This problem consists of two related issues: first, whether a divorced mother receives any child support and second, how much she receives. This second issue introduces the possibility of sample selection bias: estimates of the determinants of support received may be biased if some omitted factors that determine whether the woman gets into the sample (i.e., receives any child support) also determine how much she receives. To correct for this sample selection bias, we use a technique developed by Heckman (1979) which eliminates the bias by introducing a new independent variable λ (negatively related to the probability of receiving child support) into the regressions on amount of child support received. Using maximum likelihood probit, first we estimate determinants of the probability of receiving any child support in 1978, conditional upon some payment being due. Estimated partial derivatives of these factors are presented in cols. 1-3 of Table 2. Next we use the probit estimates to compute a \(\lambda\)-value for each mother who receives any child support, and enter it in OLS regressions on child support received, holding constant the amount due. 17 These results appear in cols. 4-6 of Table 2. Because previous researchers did not explicitly recognize the possibility of sample selection bias, their regression results on factors affecting child support received may be biased (see, for example, Cassetty, 1978).

Ex poste, we find only limited evidence of sample selection bias: the coefficient on λ is insignificantly different from zero in both cols. 4 and 5 and only significant at a 10 percent level in col. 6. The negative sign on λ in col. 6 indicates that omitted factors which lower the probability of receiving child support (and therefore increase λ) also lower the amount received.

Black women are less likely to receive child support and, when they do, receive less than nonblack women, even after controlling for the lower amount

they are due. However, these differences become insignificant for blacks who know their ex-husband's income. Although women of Spanish origin are equally likely to receive child support as non-Spanish women, they do receive significantly less child support. The coefficient on SPANISH becomes even more negative for those few who know their ex-husband's income.

EDUC, AGE and AGESQ may serve as proxies for the absent father's ability to pay. Education has a positive impact on the likelihood of payment but not on the amount. Advancing age increases both the probability of receiving payment and the amount paid at a decreasing rate (reminiscent of the manner in which earnings change with age). When HUSINC is included, these proxies for ability to pay become insignificant or less significant in the probability of receipt equation (col. 3), but age remains significant in the equation on the amount received (col. 6). Although HUSINC significantly increases the likelihood of payment, it has no significant effect upon the amount paid once we control for the amount due. Thus, we conclude that while the absent father's income is an important determinant of the amount of child support awarded (each \$5000 increment raises the amount by \$219) and of whether or not ne pays anything, it is not an important determinant of the portion of the award that he pays. This suggests that fathers with negative transitory income are likely to evade the support obligation altogether rather than pay a smaller portion of the amount due. 18

Three measures of the impact of children are included. Holding constant the length of time since the divorce (YEARSDIV), having older children (KID6T017) increases the probability of receiving support, consistent with the hypothesis that absent fathers are more likely to pay support for children whom they lived with longer. As the number of children due support increases (PATERNR), the probability that support will be paid appears to decline although

this effect is significant only in the equation in col. 2. This result is difficult to explain. If the woman has other children not fathered by her most recent ex-husband (OTHERKID), this significantly reduces by 7 to 9 percent the probability that he pays child support. This result is more understandable. Given the amount due, neither the number nor ages of the children affects the amount of support received, except in the sample that knows HUSINC. This group (col. 6) receives \$83 more for each additional child but \$253 less for older children, another result that is difficult to explain.

women were asked whether their child support awards were court-ordered or agreed to voluntarily. Those reporting voluntary agreements (CSVOL) are between 15 and 22 percent more likely to receive payments; however, given the amount agreed to, the effect of CSVOL on the amount received is positive but insignificant. Apparently voluntary initial agreement, which probably indicates something about the character of the father or of the relationship, has lasting effects.

If the marriage that ended in divorce was not the woman's first, her likelihood of receiving payment is reduced for each higher-order marriage (NUMMAR) by around 8.5 percent, at least when controlling for her ex-husband's income. Moreover, she receives up to \$204 less support per higher-order marriage, controlling for the amount due. This is especially interesting in light of the finding that women in higher-order marriages seem to negotiate somewhat higher support awards (results not shown).

Absent fathers reported by their ex-wives to have other children to support (HUSCHD) are no less likely to pay child support. While new children may reduce his ability to support absent ones, the father's decision to remarry and have more children suggests he values family life and is apt to be more conscientious about providing support for his absent children. Because of these

competing effects, the insignificance of HUSCHD does not disturb our hypothesis that the probability of receiving child support is largely a function of the absent father's ability to pay. 20

The variable YEARSDIV has a significant negative effect upon the probability of receiving child support, but not on the proportion received. Each additional year since the divorce reduces the probability of receiving support by approximately 2 percent. This relationship appears to be linear. The absent father may be less likely to pay support with each passing year if he loses physical or emotional contact with his children. (We have no information on whether he has visitation rights.) This explanation is reinforced by noting that the coefficient on YEARSDIV is much smaller in magnitude for the sample of women who know HUSINC, women who may be presumed not to have lost complete contact with their ex-husbands.

whether the woman is remarried (REMAR) does not affect the likelihood she receives any child support, but does appear to lower the dollar amount she receives by up to \$159, except for those (remarried) women who know HUSINC. This suggests that when his ex-wife remarries, the absent father may reduce somewhat the amount of child support he pays, but not attempt to renegotiate the amount due (REMAR is insignificant in the equation on amount due--results not shown), nor stop paying altogether (REMAR is insignificant in cols. 1-3 of Table 2). However, another possibility is that our regression suffers from reverse causality: women who receive less of the support they are due may be more likely to remarry. We examine this possibility in the next section.

IV. Empirical Analysis of Remarriage

The majority of women in the United States who divorce eventually remarry. For example, in the 1979 CPS, 70 percent of divorced mothers remarried within

15 years of their divorce. This identical remarriage rate for divorced women was found in the 1967 Survey of Economic Opportunity (SEO) data by Becker, Landes, and Michael (1977). In the CPS, one-half of all mothers remarried within 5 years of their divorce, and 29 percent within 2 years.²²

The modern theory of job search has recently been applied to marital search by, among others, Becker, Landes, and Michael (1977) and Hutchens (1979). Briefly, the probability of remarriage depends upon a woman's own search behavior and upon her attractiveness to potential marriage partners. A divorced woman can decide whether or not to engage in search, how intensively to search, and how long to search. These decisions depend upon her expected gain from remarriage which is a function of her expected future flow of real income if single compared to her distribution of offers of real income if remarried, net of search costs. A divorced woman's distribution of offers will depend upon her attractiveness to potential mates, which will be a function of some characteristics we can observe such as age, some we cannot observe such as charm or beauty, and the amount of "marital-specific" capital (investments that are significantly less valuable when divorced, such as children) from her previous marriage. As Becker, Landes, and Michael (1977, p. 1155) point out, "positive" specific capital in one marriage may be "negative" specific capital in a subsequent marriage.

Some factors affect her search behavior and her attractiveness to others in opposite directions making it difficult to determine their net effect upon the probability of remarriage a priori. One example is a woman's portable (carries into marriage) nonwage income. A higher income if single would reduce the gain from remarriage which might cause a woman to choose not to search or to search less intensely and longer. However, it also enhances her attractiveness to potential spouses, causing an increase in the mean of the

offer distribution. This would tend to increase her probability of participation in search, and have an indeterminant impact on intensity and duration of search (Hutchens, 1979, p. 371). Hutchens cites Becker's theoretical analysis (1973, p. 891) as evidence that the latter effect tends to dominate the former. Thus, greater portable nonwage income is expected to increase both the probability of participation in and the duration of search.

The presence of children is another factor with competing effects. The greater the number of children, ceteris paribus, the greater the economic gain from remarriage; thus, the woman is likely to set lower standards for a new husband and to search more intensely. However, this greater specific capital from the previous marriage also reduces her attractiveness to potential marriage partners which decreases the number and mean value of marriage offers.

We hypothesize that women will remarry quickly if they are either unusually attractive to potential mates or have established a low "reservation" set of characteristics for a new husband. Similarly, women will take longer to remarry (or never remarry) if they are either less attractive partners or have set a higher standard for a new husband.

We related the probability of remarriage by the \underline{n} th year after termination of the previous marriage (n = 2, 5, 10 and 15) to the expected gain from remarriage. We selected our sample so that all women were divorced (excludes separated) at least \underline{n} years. (Thus, each successive sample is smaller than the previous one.) We estimated a logistic function for each sample by maximum likelihood methods. Results for the n = 15 group are not shown because that sample contains less than 150 observations and because most of these women had remarried by n = 10. Partial derivatives of the logistic function with respect to each independent variable, evaluated at the sample mean, for divorce durations of 2, 5 and 10 years are reported in Table 3.

A higher age at divorce (AGEDIV) significantly reduces the probability of remarriage of divorced mothers at all three durations. The increase in the size of the coefficient with each successive duration suggests that age at divorce becomes an increasingly important determinant of remarriage probabilities at higher durations, possibly because it reduces a woman's attractiveness as a marriage partner. The greater her number of previous marriages (NUMMAR), the less likely a woman is to remarry, holding AGEDIV constant. Ceteris paribus, a greater number of previous marriages might reduce her attractiveness to potential marriage partners or her inclination to try again. Again, this effect becomes larger at higher durations.

We might expect to find a secular rise in the probability of remarriage because the divorce rate has been increasing, which makes available a greater pool of potential mates and reduces the stigma associated with being a divorced woman. Indeed, we find that for durations of 5 and 10 years, given AGEDIV, the more recent the divorce (the lower YEARSDIV), the more likely is a woman to remarry. This effect is significant in the regressions in columns 3 and 5.

As discussed above, a greater number of children (PATERNR) will have the competing effects of raising search intensity but lowering potential marriage offers. (The former effect may be mitigated by the fact that a greater number of children probably increases her costs of search and reduces her need for additional companionship.) We find that the probability of remarriage within 2 years of divorce (col. 1) increases as the number of children increases up to 4 and decreases thereafter. The woman may have set her reservation standard low in order to remarry quickly for her children's sake, but too many children make it difficult to attract offers. At higher durations, the effect is linear: each additional child reduces the probability of remarriage within 5 years by 3.9 percent (col. 2) and within 10 years by 9.6 percent (col. 4).

When we control for child support due per child (PCCSDUE), the coefficient on PATERNR is still negative and significant at both durations. This suggests that what is unattractive about a greater number of children is more than just the cost of caring for them. The increase in the size of the coefficient on PATERNR with increasing divorce duration suggests that the woman's attractiveness as a marriage partner becomes an increasingly important determinant of remarriage the longer she has been divorced.

Alimony is nonportable income; that is, it stops with remarriage. As such, it should have a negative effect upon the probability of remarriage. AWARDAL is negative at all divorce durations, becomes larger at higher durations, but is significant only at 10 years in the regression controlling for child support due (col. 5). Women awarded alimony are 8.2 percent less likely to have remarried 5 years after divorce and 16.2 percent less likely 10 years after. This finding is consistent with findings by Hutchens (1979, p. 377) that nonportable transfers tend to reduce remarriage probabilities. Unfortunately, this is the only information about alimony we have that is relevant to the remarriage decision.

Child support income is legally portable between the single and married status. As such, it has the competing effects discussed above of decreasing the gain from remarriage but of increasing the woman's attractiveness to potential mates; therefore, theoretically its effect upon remarriage is indeterminate. Where Hutchens (1979, p. 377) was unable to draw any conclusions on the relationship between portable nonwage income and remarriage, we are able to do so. Two additional considerations make it likely that child support income will decrease the gain from remarriage more than other income. First, if a divorced mother spends child support income on the children, in part on goods and services substitutable for child care time, then it reduces the benefits

to be derived from the sexual division of labor in the care of children.

Second, although legally portable, in practice child support income may be only partly portable. We showed in Table 2 that for otherwise identical women due the same amount of child support, remarried women receive up to \$159 less support than divorced women. If fully anticipated, this reduction in payments would serve to further reduce the expected gain from remarriage.

Women awarded child support (AWARDCS) are 5.3 percent less likely to remarry within the first 2 years after divorce, but this effect is significant only at the 10 percent level (col. 1). If not awarded child support, a woman stands to gain a great deal more from a quick remarriage than a woman awarded support. Consequently, she may search more intensely and set lower standards for a new husband.

In the equations in columns 3 and 5, we add measures of whether child support was due in 1978 (CHSUP78) and of the amount of child support due per child (PCCSDUE). Women both awarded child support and to whom it was due in 1978 were 3.9 percent less likely to have remarried 5 years after the termination of their previous marriage and 11.1 percent less likely 10 years after than women not awarded child support. For those awarded and due child support in 1978, each additional \$500 due per child reduces the probability of remarriage within 5 years by 4.2 percent. Within 10 years, the effect is smaller and statistically insignificant. On net, child support income reduces the gain from remarriage more than it increases the woman's attractiveness to potential mates, probably because several factors work in this direction. Thus, we conclude from these findings on child support that this type of portable nonwage income reduces the probability of remarriage.

Holding constant whether and how much child support is due in 1978, AWARDCS becomes positive and significant. Women awarded child support but due none in

1978 (around 20 percent of the sample) are 18-19 percent more likely to remarry than women not awarded support, even though women both awarded and due support are less likely to remarry. If a woman is due child support, or due more support, she searches longer before remarrying, and may not remarry at all. But, if her child support income stops she is much more likely to remarry than if it were never awarded at all.

Two other variables that have the competing effects of reducing the woman's gain from remarriage but of increasing her attractiveness to others are her wealth at divorce (SETVAL) and her education (EDUC). SETVAL is insignificant in all regressions; EDUC is consistently negative, but significant only at the 10 percent level for durations of 2 and 5 years.

AFDC and other public assistance benefits available to single mothers are other important forms of nonportable income which would reduce the gain from remarriage and prolong the duration of divorce. Because remarriage occurs in many different years in our sample, we have no simple measure of the relevant public assistance benefits when each woman was deciding upon remarriage. 23 However, some of our variables may be interpreted as proxies for the likelihood a divorced woman received AFDC. For example, by 5 years after termination of the marriage, black women (BLACK) are 32 percent less likely to have remarried than similar nonblack women. If black women, women in the northeast (NEAST) or in central cities (CC), and women with many children are somewhat more likely AFDC candidates than other women, then our results support previous findings (Hutchens, 1979) that welfare reduces the probability of remarriage.

V. Empirical Analysis of Labor Force Participation

Although differences in female labor force participation rates have narrowed recently, unmarried women are still more likely to be in the labor force than married women. Among our sample of 1503 currently divorced or

March 1979, compared with 60.3 percent of our sample of 936 remarried mothers. The greater labor force attachment of divorced mothers is an obvious response to their loss of other family income. In this section we examine factors affecting the variation in labor force participation rates among divorced mothers, paying special attention to the influence of family support—child support and alimony.

The probability of labor force participation should depend negatively upon the value of a woman's time at home, positively upon the value of her time in the market, and negatively upon nonlabor income. The presence of younger children or more children raises her time value at home, while education and job experience raise her value more in the market than in the home. In addition, if market work imposes fixed entry costs, then a woman may elect not to participate unless her desired hours of employment exceed some critical minimum. And since hours of work depend negatively upon nonlabor income, a ceteris paribus increase in such income should reduce the likelihood a woman participates in the labor force. For divorced mothers, most nonlabor income consists of income from property, earnings of other family members, public welfare, and alimony and child support payments from her ex-husband.

In contrast to the other sources of nonlabor income, child support payments might exert an additional and opposite influence upon labor force participation. Since this income is awarded to support the children, a woman may feel explicitly or implicitly constrained to spend it entirely on goods and services for them. If these commodities (such as day-care for small children) can substitute for her own home time, then she may be able to reduce her hours of work in the home, and raise her desired hours of employment beyond the critical minimum required for labor force entry. If this occurs,

then the net impact of child support payments on labor force participation is ambiguous. On the one hand, child support has an income effect of raising leisure, reducing desired hours of work, and therefore reducing the probability of labor force participation. On the other hand, child support has a substitution effect of increasing the quantity of goods devoted to children, decreasing the amount of time spent on them, and therefore raising the likelihood of labor force participation.

Table 4 reports estimated partial derivatives from logistic models on factors affecting the likelihood of labor force participation in March 1979 for our sample of divorced mothers. All three variations contain the same economic and demographic variables but different child support and alimony variables. The coefficients on the common set of independent variables change very little across functional forms.

The pattern of coefficients on the number of children under 18 years by age groups is consistent with findings from studies for married, spouse-present women (Smith, 1980). Compared with having at home one child age 18 to 20, having one child age 6 to 17 (KIDLT18) reduces the probability of participation by 3 percent; having one child age 3 to 5 (KIDLT6) reduces participation another 6 percent; and having one child under 3 (KIDLT3) reduces participation another 13 percent. Small children raise the value of the woman's home time and reduce her likelihood of labor force entry. Each additional adult in the household (NADULT) who might share in child care duties increases her labor force participation by up to 4.5 percent.

As the woman becomes more valuable in the market, her labor force participation increases. Each additional year of education (EDUC) raises her entry probability by over 5 percent. Advancing age (and presumably experience) raises entry at a declining rate (AGE is positive and AGESQ is

negative). Finally, women who have been divorced a longer time (YEARSDIV) are less likely to enter the job market. This result appears counterintuitive if labor market entry is viewed as one possible way to restore economic well-being lost at divorce (where remarriage is another possible way). One explanation consistent with this result is that mothers who are likely candidates for public assistance and therefore less likely to be working remain divorced (or separated) for a longer time than do other mothers to maintain their eligibility. Alternatively, this result may reflect the secular trend toward rising labor force participation among younger (more recently divorced) women.

Black women (BLACK) are around 8 percent and women of Spanish origin (SPANISH) around 10 percent less likely to participate in the labor force than other divorced mothers. This may reflect cultural differences and/or discrimination against minority women in the labor market. Women in the northeast (NEAST) are 12 to 13 percent less likely than other women to participate, while women in central cities (CC) are 6 percent less likely to participate. Since women with these characteristics make up a disproportionate share of the AFDC population, these results also suggest that an increased likelihood of being on public assistance reduces labor force participation, findings consistent with those of other studies such as Keeley et al. (1978).

AFDCMAX equals the maximum amount of monthly AFDC payments that a woman with a given number of children in a particular state could receive if she does not work (and has no other income) as of July 1978. (Data on AFDCMAX were obtained from Department of Health, Education and Welfare, 1979.) In other words, it represents potential, not actual, welfare benefits. Generous public assistance benefits, ceteris paribus, should be expected to reduce labor force participation. Our finding indicates that each additional \$100 per month in benefits reduces the likelihood of labor force participation by around 5

percent. When these potential benefits are replaced by actual benefits received, the regression fits even better but it then suffers from an obvious simultaneity bias. 25

As expected, the coefficient on other family income excluding child support, alimony, and public assistance (OTHFINC) is negative and significant; each additional \$1000 in annual income deters labor market entry by slightly more than 1 percent. The coefficient on amount of alimony due (ALIMDUE) is also negative and significant, but each additional \$1000 of alimony deters entry by 2.7 percent (col. 1). Controlling for whether or not alimony is due in 1978 (ALIM78), the coefficient on amount received (ALIMREC) is virtually identical to the one on ALIMDUE (col. 2). One reason that alimony appears to reduce participation more than other income is that its coefficient may be biased downward. Women awarded alimony are probably less likely to have worked in the labor market during their marriage and thus, with less previous job experience, less likely to be working now. Therefore, the coefficient on alimony may reflect both an income effect and an "experience" effect. 26

Unlike alimony, child support income appears to be positively associated with labor force participation. This is consistent with past work demonstrating a positive simple correlation between labor force participation and the receipt of child support (Grossman and Hayghe, 1982), but extends it by showing that even when other characteristics (such as race, age, education, and family size) are held constant, the positive association persists. The coefficient of .0000305 on CHSUPDUE (col. 1) indicates that among women due child support in 1978, one who is due the average amount (slightly over \$2100) is 6.4 percent more likely to participate in the labor force than an otherwise identical woman due no child support. Furthermore, each additional \$1000 of support due raises participation by 3.0 percent. The positive sign is

consistent with our hypothesis that child support payments are used to purchase goods and services that substitute for mother's home time and thus facilitate her labor force participation.

In cols. 2 and 3, we enter alternative measures of child support due and/or received. Women due child support in 1978 (CHSUP78) are 11 to 14 percent more likely to participate in the labor force than women not due support. One reason why this effect appears so large is that the coefficient on CHSUP78 may be biased upward. At divorce, women who anticipate future labor force participation may seek to obtain child support, which is nontaxable income, instead of alimony, which is taxable. Once we control for whether it is due, the amount of child support received (CHSUPREC) has no significant additional effect on participation (col. 2). However, for the 58 percent of divorced mothers due child support in 1978 who received it regularly (CSREGULR), the difference in labor force participation over women due no support is 6.1 percent less, but this effect is insignificant (col. 3). This suggests that the uncertainty created by receiving child support payments on an irregular basis may cause a greater increase in the labor force participation of divorced mothers than if payment were regular.

VI. Summary and Conclusions

In this section we summarize our most important findings and discuss their implications for the formation of public policy. Also, we suggest promising directions for future research.

Like other forms of nonlabor income, child support payments were found to lower the probability of remarriage. But unlike other forms of nonlabor income, child support payments were found to raise labor force participation. Each of these findings is consistent with our hypothesis that child support income serves as a substitute for the absent father. If a divorced mother

receives child support, her economic incentive to remarry is reduced. This allows her to increase the duration of marital search which should improve the quality of the match and thus the likelihood that the new marriage will last. In addition to these long-run benefits, child support payments also increase a divorced woman's labor force participation, which raises her family's income and well-being in the short-run. Thus, child support payments are found to have both immediate and future benefits.

It is interesting to contrast the effects of child support, a private transfer, with AFDC payments, a public transfer. Previous work (Hutchens, 1979) has found that AFDC reduces remarriage rates, just as we found that child support does. Other previous work (Keeley et al., 1978) has found that AFDC reduces labor force participation unlike our finding that child support raises participation. While this may be evidence that child support income does not create the same work disincentive as AFDC, it is also possible that women not awarded child support, who are more likely candidates for AFDC, exhibit a fundamentally different response to nonwage income.

Within the limitations imposed by our data, we found that somewhat different factors affect the award of child support than its receipt. The likelihood of being awarded child support depends upon the needs of the mother and her children, and upon the absent father's long-term ability to pay. There appears also to be substantial racial differences: black women are less likely to be awarded support. In contrast, the likelihood of receiving child support due depends less upon race or the circumstances of the woman, and more upon the current financial well-being of the ex-husband. His income was found to affect whether or not any child support is actually paid, but not how much is paid. Apparently, absent fathers with low current incomes evade payment altogether, instead of partially cutting back on payments. This suggests that

one effective strategy for child support enforcement may be to get nonpaying fathers to pay at least some portion of the child support they owe.

Given the beneficial effects of child support upon the well-being of female-headed families, it is unfortunate that such support is not awarded to or received by more divorced mothers and their children. Recent state and federal legislation have attempted to improve the enforcement of existing child support contracts. In future work we plan to study the effects of these new laws on child support receipts. However, no degree of enforcement can improve the well-being of a family never awarded child support in the first place. More effort needs to be placed on improving the system of awards. Initial work in this direction has been accomplished by Garfinkel (1982). Our analysis of determinants may help to provide a foundation for improving both the enforcement and award of child support.

Notes

- 1. Statistical Abstract 1982-83, Table 60.
- 2. Statistical Abstract 1982-83, Table 717.
- 3. Statistical Abstract 1982-83, Table 735.
- 4. National Organization of Women President, Judy Goldsmith, <u>New York Times</u>, September 1, 1983.
- 5. <u>Current Population Reports</u>, Series P-20, No. 380, p. 5.
- 6. Glick and Norton (1977).
- 7. The idea for this figure comes from Bradbury et al. (1979).
- 8. Subfamilies pose special problems of income sharing that we cannot readily handle. Never-married mothers differ in significant ways from ever-married mothers and thus must be considered separately. Women who are widowed after remarriage form a small group whose economic position may depend more upon their current circumstances than upon having been divorced.
- 9. The population estimates published in that report differ slightly from the ones we report in Figure 1.
- 10. Black mothers are significantly less likely to be awarded support even after controlling for other factors.
- 11. Around 17.2 percent of all mothers—16.8 percent of nonblacks and 21.6 percent of blacks—awarded child support were not due any in 1978 for a variety of reasons such as death of the previous spouse and children past the age of eligibility for support.
- 12. In separate regression equations we found no systematic differences between them in the estimated coefficients.
- 13. Equations estimated for the nonblack sample alone are nearly identical to those for all races combined, with the notable exception that the black intercept dummy is usually significant in the combined sample.

- 14. It would be especially desirable to have some direct information on the financial circumstances of the father at the time of divorce. For our sample, it is not possible to find a simple measure of the legal environment at divorce because the divorce year varies from 1945 to 1979. Ten percent of the sample were divorced in 1965 or earlier and 29 percent in 1970 or earlier. We could not in any case account for the individual variation from judge to judge in a study at the national level. For a study that takes account of such variation in a single state, see Chambers, 1979.
- 15. We also estimated this equation for the sample of currently divorced (or separated) women only for which we know marriage duration. When we enter it as an independent variable in place of AGEDIV, its coefficient is positive and significant for nonblacks, but insignificant for blacks.
- 16. This variable is believed to be subject to considerable measurement error, which would increase its standard error. It is thus surprising that it turns out as significant as it does.
- 17. The sample means (and standard deviations) for these λ variables are as follows:

λ(1)	.414(.246)
λ(2)	.378(.281)

λ(3) .289(.212).

18. In a separate regression, we included child support due (CHSUPDUE) as an explanatory variable. Holding HUSINC constant, its coefficient is small but significantly positive: each additional \$100 of support due increases the probability that some support will be received by two-tenths of one percent. If the absent father's permanent or lifetime income contributes positively to the amount of child support awarded, then the significance of both CHSUPDUE and HUSINC in the same regression could indicate that his permanent income (CHSUPDUE) and current income (HUSINC) have separate effects upon his

probability of paying support. Holding current income constant, absent fathers with higher permanent income are somewhat more likely to pay support. Holding permanent income constant, fathers with higher current income are much more likely to pay support. Again this is consistent with the hypothesis that current ability to pay has a strong impact upon child support payments.

- 19. Cassetty (1978) found that absent fathers who remarried were no more likely to pay child support, but paid significantly more. Since she does not control for amount due, her findings on amount received confound determinants of award amount with receipt amount, and thus are not directly comparable to ours.
- 20. Another reason why this coefficient is insignificant may be that this variable is measured with error.
- 21. Our results would appear to disagree with those of Cassetty (1978) who finds that remarried women are less likely to receive child support and also receive less child support. However, her dependent variable combines child support and alimony income together. Since alimony stops with remarriage while child support is supposed to continue, her results would inevitably be negatively biased. We are fortunate to have data that enable us to separate child support from alimony income.
- 22. In the 1967 SEO, only 43 percent of women remarried within 5 years and 22 percent within 2 years. Either divorced mothers remarry more rapidly than divorced women in general, or there has been a secular trend since 1967 toward shorter intervals between divorce and remarriage. We offer some evidence of the latter effect in our empirical estimates.
- 23. Had we restricted our sample to remarriages that took place within say the last 2 years instead of <u>n</u> years after divorce, we could have included measures of AFDC (as did Hutchens, 1979). But for the problem we are interested in our specification (similar to that of Becker, Landes, and Michael, 1977) is more appropriate.

- 24. We also estimated equations with labor force participation for any part of 1978 as the dependent variable. The results--particularly on the child support and alimony variables--were virtually identical.
- 25. In addition, the size and significance of the coefficients on BLACK, SPANISH, NEAST, CC, KIDLT3, KIDLT6, KIDLT18, and YEARSDIV are reduced. This is consistent with our notion that each of these variables serves in part as a proxy for the probability of going on public assistance.
- 26. However, for a sample of recently divorced (or separated) mothers for whom we are able to control for whether or not they were in the labor force prior to the termination of their marriage (in March 1975), the coefficient on alimony due is virtually identical to the one reported here, suggesting that the "experience" bias may be negligible for this particular sample.

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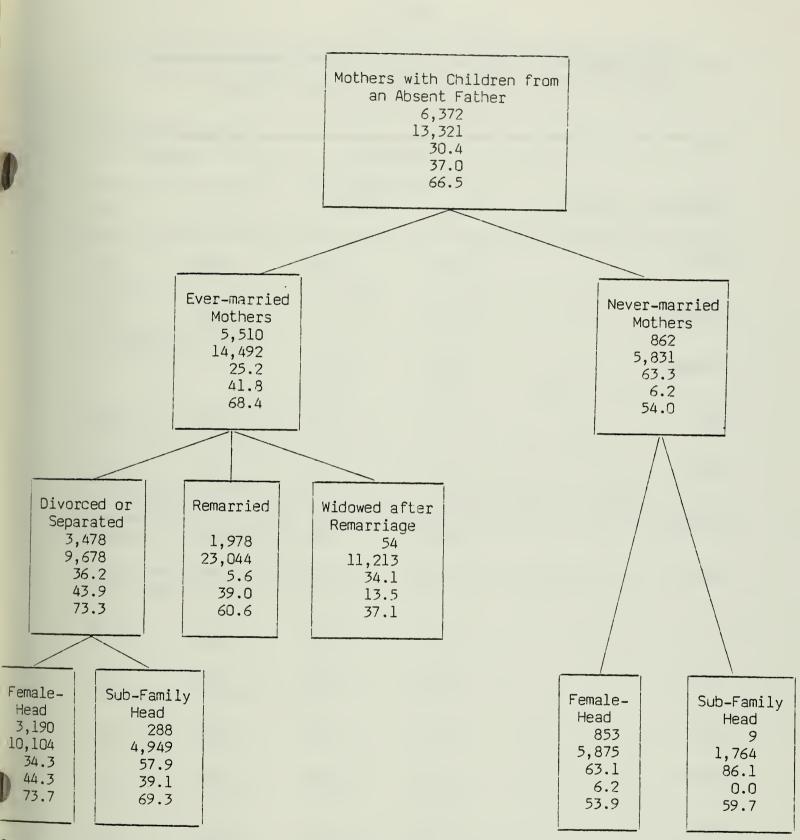
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Source: Tabulations by authors from the computer tapes of the March—April Match File of the 1979 Current Population Survey.

FIGURE 1. MOTHERS 18 AND OVER WITH CHILDREN FROM AN ABSENT FATHER IN 1979: NUMBER OF WOMEN (IN THOUSANDS); AVERAGE TOTAL FAMILY INCOME; PERCENTAGE IN POVERTY; PERCENTAGE RECEIVING CHILD SUPPORT; LABOR FORCE PARTICIPATION RATE.

Table 1

Effect of Selected Factors on the Probability that Child Support is Awarded for All Ever-Divorced or Currently Separated Women, Age 18 and Over, with Own Children Under 21 Years of Age from an Absent Father as of Spring 1979, by Racea

	Nont	olack	Bla	ick
Independent Variable	(1)	(2)	(3)	(4)
EDUC	.025	.019	.020	.016
	(4.91)	(3.60)	(1.67)	(1.27)
COLLGRAD	125	126	.022	.027
	(2.79)	(2.60)	(0.14)	(0.17)
SPANISHD	088 (2.46)	089 (2.44)	• • •	• • •
NEAST	086	074	055	092
	(3.00)	(2.44)	(0.54)	(0.88)
NCENTR	.018 (0.64)	.004	040 (0.41)	063 (0.63)
SOUTH	055	059	058	069
	(2.06)	(2.10)	(0.65)	(0.76)
SMSA	.014	.008	.160	.155
	(0.60)	(0.32)	(1.61)	(1.53)
CC	024	016	179	170
	(0.88)	(0.55)	(2.16)	(2.00)
PATERNR	.047	.04l	.022	.019
	(4.01)	(3.38)	(1.02)	(0.84)
KID6T017	.053	.042	.025	.017
	(2.28)	(1.69)	(0.30)	(0.20)
NUMMAR	033	024	.042	.053
	(1.38)	(0.96)	(0.50)	(0.64)
REMAR	040	023	073	094
	(1.69)	(0.91)	(0.86)	(1.06)
AGEDIV	.001	001	.008	.006
	(0.84)	(0.39)	(2.33)	(1.68)

Table 1--continued

	No	nblack	Bla	ack
Independent Variable	(1)	(2)	(3)	(4)
SEP	207 (7.50)	129 (4.39)	291 (4.62)	207 (3.13)
SETVAL	• • •	.094 (6.90)	•••	.151 (2.51)
Constant	097 (1.13)	05l (0.57)	439 (1.70)	389 (1.49)
Likelihood Ratio Test (Chi-sq)	180.9	241.7	48.6	49.8
N	2027	1907	389	373
Mean of Dependent Variable	.775	.769	.476	.453

aThe logistic function $P=1/(1+e^{-\beta X-U})$ was estimated by maximum likelihood methods and the coefficients reported above are $\beta \overline{P}(1-\overline{P})$ where \overline{P} is the mean of the dependent variable reported in the last row of the table. Asymptotic t-values are shown in parentheses.

DSPANISH was omitted from the equation for blacks because less than 1 percent of the sample was Spanish.

Table 2

Effect of Selected Factors on the Probability that Child Support is Received and on the Amount of Child Support Received by Ever-Divorced Women

		lity of Rece ild Support	eiving	Amou	unt of Child Received	
	(1) ^a	(2) ^a	(3) ^a	(4) ^C	(5) ^C	(6) ^C
BLACK	101	123	043	-299	-259	- 56
	(2.69)	(3.03)	(0.73)	(2.49)	(1.70)	(0.38)
SPANISH	030	020	104	-346	-406	-926
	(0.61)	(0.38)	(1.39)	(2.83)	(3.02)	(3.60)
NEAST	.082	.081	.094	177	170	107
	(2.36)	(2.23)	(1.99)	(1.30)	(1.71)	(0.84)
NCENTR	.055	.065	.110	- 50	- 5	-139
	(1.85)	(2.12)	(2.83)	(0.67)	(0.05)	(1.08)
SOUTH	.042	.047	.060	-114	- 71	- 90
	(1.43)	(1.50)	(1.55)	(1.58)	(0.90)	(0.88)
SMSA	018	015	045	39	18	- 67
	(0.70)	(0.54)	(1.35)	(0.66)	(0.29)	(0.77)
CC	.010	.012	.079	90	95	30
	(0.32)	(0.36)	(1.84)	(1.30)	(1.29)	(0.26)
EDUC	.015	.016	.013	0.2	6	- 22
	(2.87)	(2.89)	(1.90)	(0.02)	(0.36)	(1.12)
AGE	.027	.022	.005	59	67	59
	(2.66)	(2.05)	(0.46)	(1.95)	(2.27)	(2.03)
AGESQ	0003 (2.12)	0002 (1.52)	0001 (0.45)	-0.6 (1.64)	-0.7 (1.90)	
PATERNR		026 (2.13)		18 (0.63)	- 13 (0.38)	83 (2.03)
OTHERKID		069 (2.35)			49 (0.51)	
KID6T017	.066 (2.02)	.087 (2.55)	.072 (1.76)	- 64 (0.74)	- 20 (0.19)	
CSV0L		.221 (8.03)		173 (1.23)	271 (1.63)	
NUMMAR		039 (1.40)			- 204 (2.74)	

Table 2--continued

		oility of Re Child Suppor		Amou	nt of Child Receive	
	(1) ^a	(2) ^a	(3) ^a	(4) ^C	(5) ^C	(6) ^C
YEARSDIV	020 (6.94)	020 (5.88)	011 (2.63)	- 7 (0.42)	- 15 (0.84)	21 (1.39)
REMAR	008 (0.30)	005 (0.17)	028 (0.80)	-159 (2.63)	-123 (1.92)	- 53 (0.62)
HUSCHD	•••	012 (0.48)	•••	• • •	- 41 (0.66)	•••
HUSINC	•••	•••	.027 (3.33)	•••	•••	-2.96 (0.10)
CHSUPDUE	•••	•••	•••	0.891 (80.1)	0.897 (79.2)	0.930 (61.6)
λ(1) ^b	•••	• • •	•••	198 (0.45)	•••	•••
λ(2) ^b	•••	•••	•••		433 (0.82)	•••
λ(3) ^D	•••	• • •	•••	•••	• • •	-1000 (1.70)
Constant	521 (2.89)	430 (2.30)	068 (0.32)	-1199 (1.51)	-1547 (1.88)	-574 (0.86)
\overline{R}^2	•••	• • •	•••	.877	.886	.901
Likelihood Ratio Test	219.0	624.2	270.2	•••	•••	• • •
N	1461	1259	648	1043	931	521
Mean of Depe Variable	ndent .714	.739	.804	\$1899	\$1918	\$2146

aThe coefficients reported in these columns are the probit maximum likelihood estimates $(\hat{\beta})$ multiplied by the sample mean of normal density functions evaluated at $X_{\hat{\mathbf{i}}}$, where $X_{\hat{\mathbf{i}}}$ is the vector of independent variables for the i^{th} observation. These sample means are .297 for col. 1, .280 for col. 2, and .232 for col. 3.

 $^{^{}D_{\lambda}}$ = f($X_{\hat{i}}$ $^{\hat{\beta}}$)/F($X_{\hat{i}}$ $^{\hat{\beta}}$), where f and F are, respectively, the density and distribution function for a standard normal variable, and $X_{\hat{i}}$ and $^{\hat{\beta}}$ are defined as in footnote a. See Heckman (1979), p. 156.

CSince we cannot reject the null hypothesis of no selection bias (i.e., that the coefficient on λ is zero), the usual OLS standard errors and t-statistics are appropriate. See Heckman (1979), p. 158.

Table 3

Factors Affecting the Probability of Remarriage, by Duration of Time

Since the End of Previous Marriage^a

Indonesiant		f Time Since	End of Previo		
Independent Variables	(1)	(2)	(3)	(4)	(5)
EDUC	010	014	011	010	008
	(1.78)	(1.89)	(1.47)	(0.97)	(0.73)
BLACK	215	312	320	178	149
	(4.20)	(5.21)	(5.46)	(2.25)	(1.93)
SPANISH	042	107	120	.097	.105
	(0.73)	(1.44)	(1.58)	(0.87)	(0.91)
NEAST	081	122	116	115	081
	(2.04)	(2.33)	(2.27)	(1.53)	(1.08)
NCENTR	.001	024 (0.53)	052 (1.15)	.043 (0.61)	.036 (0.53)
SOUTH	.003	025	035	.089	.105
	(0.10)	(0.56)	(0.79)	(1.25)	(1.49)
SMSA	036	067	042	038	018
	(1.26)	(1.69)	(1.08)	(0.61)	(0.30)
CC	049	107	090	230	221
	(1.39)	(2.31)	(1.98)	(3.39)	(3.29)
PATERNR	.116	039	042	096	082
	(2.16)	(2.19)	(2.35)	(3.49)	(2.99)
PATSQ	024 (2.16)	•••	•••	• • •	•••
AGEDIV	012	017	019	021	023
	(6.24)	(6.59)	(7.63)	(5.24)	(5.78)
YEARSDIV	0002	004	012	009	017
	(0.10)	(1.09)	(2.93)	(1.31)	(2.44)
NUMMAR	052	168	142	253	237
	(1.45)	(3.22)	(2.71)	(3.08)	(2.85)
AWARDAL	007	041	082	105	162
	(0.20)	(0.81)	(1.59)	(1.28)	(2.02)

Table 3--continued

	<u>Duration of</u>	f Time Since	End of Previous	Marriage (in ye	ears)
Independent	2		5		10
Variables	(1)	(2)	(3)	(4)	(5)
SETVAL	007 (0.69)	.002 (0.17)	•••	006 (0.26)	•••
AWARDCS	053 (1.72)	042 (1.00)	.188 (3.42)	047 (0.80)	.180 (2.39)
CHSUP78	•••	•••	227 (3.81)	• • •	291 (3.40)
PCCSDUE	•••	•••	834*10 ⁻⁴ (2.53)	•••	.327*10 ⁻⁴ (0.66)
Constant	.350 (3.00)	1.129 (7.28)	1.202 (7.85)	1.542 (6.01)	1.608 (6.22)
Likelihood Test (Chi-s		170.0	237.1	112.2	132.0
N	1570	1069	1150	474	500
Mean of Dep Variable	endent .298	.512	.504	.658	.656

aSee note a in Table 1.

Table 4

Factors Affecting the Likelihood of Labor Force Participation of Currently

Divorced (or Separated) Women in March 1979^a

Independent Variables	(1)	(2)	(3)
BLACK	085	076	076
	(2.31)	(2.05)	(2.06)
SPANISH	101	103	105
	(1.99)	(2.02)	(2.06)
NEAST	130	127	126
	(3.36)	(3.28)	(3.25)
NCENTR	027	030	033
	(0.70)	(0.78)	(0.84)
SOUTH	.015	.028	.025
	(0.30)	(0.53)	(0.47)
SMSA	.021	.019	.019
	(0.60)	(0.54)	(0.55)
CC	062	057	059
	(1.73)	(1.58)	(1.62)
KIDLT3	127	128	128
	(3.21)	(3.22)	(3.23)
KIDLT6	063	062	062
	(2.19)	(2.13)	(2.16)
KIDLT18	026	025	025
	(1.81)	(1.75)	(1.72)
NUMMAR	037	033	040
	(1.27)	(1.17)	(1.38)
EDUC	.053	.053	.052
	(8.72)	(8.79)	(8.76)
NADULT	.044	.045	.044
	(1.75)	(1.76)	(1.73)
AGE	.023	.023	.024
	(2.33)	(2.25)	(2.35)
AGESQ	0003	0003	0003
	(2.57)	(2.43)	(2.52)

Table 4--continued

Independent Variables	(1)	(2)	(3)
YEARSDIV	006 (2.07)	006 (2.08)	007 (2.19)
OTHFINC	115*10 ⁻⁴ (2.98)	117*10 ⁻⁴ (2.98)	120*10 ⁻⁴ (3.04)
AFDCMAX	-5.35*10 ⁻⁴ (2.77)	-4.84*10 ⁻⁴ (2.51)	-4.87*10 ⁻⁴ (2.52)
CHSUPDUE	.305*10 ⁻⁴ (2.99)	•••	•••
ALIMDUE	272*10 ⁻⁴ (2.37)	•••	•••
CHSUP78	•••	.113 (3.70)	.144 (4.12)
ALIM78	•••	.006 (0.10)	040 (0.88)
CHSUPREC	•••	016*10 ⁻⁴ (0.17)	•••
ALIMREC	•••	254*10 ⁻⁴ (1.75)	•••
CSREGULR		•••	06l (1.61)
Constant	448 (2.22)	506 (2.49)	508 (2.51)
Likelihood Ratio Test (Chi-sq)	361.8	368.6	368.0
N	1503	1503	1503
Mean of Dependent Variable	.739	.739	.739

aSee note a in Table 1.

Appendix Table A-1

Means and Standard Deviations for All Regression Samples

	All ever-divor or currently separated wom	All ever-divorced or currently separated women	Women supp to receive support in	Women supposed to receive child support in 1978	d 11d 8	Women chll	Women who received child support in 1978	ived t	Women v divorc	Women who have been divorced at least N years	been	Currently divoteed or separated women
	Nonblack	Black	۱۷	All races		Al	All races		N = 2	Z = 5	N = 10	All races
Sample size	2027	389	1461	1259	648	1043	931	521	1570	1150	500	1503
AWARDCS	.775	,476 (.509)	1.0	1.0	1.0	1.0	1.0	1.0	.779	.,424)	.,716	i
RECCS	:	:	.714 (.452)	.740	.804	1.0	1.0	1.0	:	:	:	÷
EUJC	11.920 (2.395)	11.026 (2.702)	12.069 (2.291)	12.087 (2.270)	12.389	12.270 (2.295)	12.286 (2.269)	12.582 (2.204)	11.957 (2.348)	11.902 (2.421)	11.546 (2.567)	11.685 (2.631)
COLL GRAD	.086	.041	:	÷	:	•	:	•	:	:	:	;
SPANISH	.074	.005	.052	.046	.031	.047	.042	.023	.050	.051	.058	.073
NEAST	.188	.180	.171.	.168	.159	.183	.177	.165	.159	.169	.172	.226
NCENTR	.259	.237	.213	.290	.292	.272 (.445)	.280	.301	.257	.272	.288	.248
South	.256	.460	.262	.250	.270	.260	.259	.271	.283	.279	.280	.279
SMSA	.531	.805	.559	.556	.542	.557	.555	.545	.547	.571	.598	.625 (,484)
33	.207	.663	.235	.228	.2117	.228	.22]	.213	.248	.254	.278	. 341 (474.)

Appendix Table A-1--continued

	All ever-divor or currently separated wom	All ever-divorced or currently separated women	Women supp to receive support in	Women supposed o receive child upport in 1978	3.0 1.0 8	Women chil	Women who recelved child support in 1978	ived	Women v	Women who have been divorced at least N years	been ast	Currently divorced or separated women	varced
	Nonblack	Black	Al	All races		A1	All races		N = 2	Z H S	N = 10	All races	
PATERNR	1.766 (.960)	2.229 (1.311)	1.878 (1.025)	1.851 (.993)	1.881 (1.031)	1.887	1.841	1.871 (.997)	1.743	1.741 (.989)	1.654	:	
K1061017	.787	.828	.821	.817	.804	.831	.830	.814	:	- :	:	:	
NUMMAR	1.155 (.412)	1.108	1.146 (.399)	1.158	1.164 (.428)	1.135	1.147	1.132 (.392)	1.129	1.100	1.089	1.184 (.457)	
REMIR	.426	.144	.371	.369	.355	.345	.347	.336	.298 (.458)	.504	.656	0	
AGEDIV	29.246 (7.821)	30.319 (8.290)	29.758 ^d 30.024 ^e 3 (7.540) (7.602) (30.024 ^e (7.602)	30.714 (7.774)	•	:	:	28.645 (7.563)	27.946 (7.216)	26.922 (6.814)	:	
DURMAR	10.285 ^a (7.666)	9.915 ^d (7.339)	:	:	:	:	:	:	:	:	:	:	
SEP	.142	.476	:	•	:	:	•	•	0	0	0	:	
SETVAL	.986 ^b (1.544)	.257 ^c (.867)	1.151 ^f (1.600)	:	•	•	•	:	1.019 (1.504)	.854 ⁹ (1.348)	.641 ^h (1.081)	•	
BLACK	0	1.0	.190	.085	.066	.084	.069	.061	.112	.124	.126	.222	
YEARSOIV	•	•	5.518 (4.427)	5.289 4.556 (4.214) (3.773)	4,556 (3,773)	4.949 (4.072)	4.811	4.280 (3.505)	7.638 (4.847)	9.731 (4.345)	13.568 (3.860)	4.970 (4.761)	
NEWDIV	•	•	,173 ⁶ (878.)	.188 (.391)	.223	:	:	:	o	0	0	:	

Appendix Table A-1--continued

	All ever-divorced or currently separated women	divorced ently d women	Women supp to receive support in	Women supposed o recelve child upport in 1978	d 1d 8	Women chll	Women who received child support in 1978	lved t	Women w dlvorc	Women who have been divorced at least N years	been ast	Currently divorced or separated women
	Nonblack	Black	A1	All races		A)	All races		N = 2	N = 5	N = 10	All races
HUSCHD	:	:	:	.291	:	:	.268	:	:	:	:	÷
HUSINC	•	:	:	:	3.553 (1.877)	•	•	3.716 (1.923)	•	:	:	:
AGE	•	•	35.141 35.211 (7.928) (8.023)	35.211 (8.023)	35.244 (8.198)	35.369 (7.776)	35.372 (7.888)	35.108 (7.961)	•	:	:	36.321 (9.245)
AGESQ	:	:	1298 (604)	1304 (612)	1309 (636)	1311 (596)	1313 (606)	1296 (617)	•	:	:	1405 (730)
OTHERKID	•	:	.236	.233	.204	.198	.200	.175	•	:	:	:
CSVOL	:	:	.320	.343	.378	.395	.417	.430	:	:	:	÷
CHSUPDUE	•	:	2023 (2080)	2061 (2184)	2294 (2243)	2205 (2344)	2225 (2434)	2447 (2398)	•	1052 (1360)	698 (1040)	1292 (1883)
CHSUPREC	÷	:	÷	÷	•	1899 (2263)	1918 (2345)	2146 (2399)	:	:	:	915 (1755)
CSREGULR	:	:	:	÷	:	.764	.773	.805	:	:	•	.355
AWARDAL	:	:	÷	:	÷	:	:	÷	.129	.130	.108	:
PATSQ	•	•	:	:	•	•	•:	:	3.960 (4.773)	•	:	:

Appendix Table A-1--continued

	All ever-divord or currently separated women	All ever-divorced or currently separated women	Wome to re suppo	Women supposed to receive child support in 1978	child 1978	Womer	Women who received child support in 1978	eived rt	Women	Women who have been divorced at least N years	been east	Currently divorced or separated women
	Norblack	Black	A	All races		ď	All races		N = 2	N = 5	N = 10	All races
CI ISUP 78	÷	:	1.0	1.0	1.0	1.0	1.0	1.0	:	.581	.472	.613
PCCSDUE	÷	÷	:	÷	:	:	:	:	:	654 (908)	442 (668)	:
AL IMDUE	:	:	:	÷	:	:	:	:	÷	:	÷	247 (1135)
ALIM78	:	÷	:	÷	:	:	:	:	:	:	÷	.105
ALIMREC	:	÷	:	÷	:	:	•	•	:	:	:	199 (1041)
AFDCMAX	:	:	÷	:	÷	:	•	÷	:	•	:	286 (113)
INLF79	:	÷	÷	÷	÷	÷	:	÷	:	:	:	.739
KIDLT3	:	:	:	÷	:	:	:	:	:	•	:	.153
KIDLT6	:	•	:	÷	:	:	•	:	:	•	:	.410
K10i_T18	:	÷	:	÷	÷	:	:	:	:	:	:	1.820 (1.221)
NAGULT	:	:	÷	÷	•	:	:	:	:	:	:	1.400
OTHEINC	:	•	:	÷	:	÷	÷	÷	:	:	•	2222 (4253)

Afor currently divorced women only.
Usample size is 1907.
Csample size is 773.
dsample size is 1453.
Esample size is 1253.
fsample size is 1345.
Sample size is 1069.
hSample size is 1069.

Table A-2

Definition of Variables

= 1 if child support is awarded and 0 otherwise. AWARDCS

= 1 if child support is received and 0 otherwise. **RECCS**

= number of years of school completed by the woman. **EDUC**

= 1 if woman is a college graduate and 0 otherwise. COLLGRAD

= 1 if woman is of Spanish origin and O otherwise. SPANISH

= 1 if woman lives in the northeast and 0 otherwise. **NEAST**

NCENTR = 1 if woman lives in northcentral states and 0 otherwise.

= 1 if woman lives in the south and 0 otherwise. SOUTH

= 1 if woman lives within an SMSA and O otherwise. SMSA

= 1 if woman lives within the central city of an SMSA and 0 otherwise. CC

= number of children under 21 fathered or adopted by ex-husband who PATERNR are living with their mother.

PATS0 = PATERNR squared.

= 1 if there are one or more children age 6 to 17 present and 0 KID6T017

otherwise.

NUMMAR = number of the marriage that ended in divorce.

REMAR = 1 for remarried women and 0 otherwise.

AGEDIV = woman's age at divorce.

DURMAR = duration of the marriage that ended in divorce.

SEP = 1 for currently separated women and 0 otherwise.

SETVAL = index of property settlement with 0 = none; 1 = less than \$5000;

2 = \$5000-9999; 3 = \$10,000-19,999; 4 = \$20,000-29,999;

5 = \$30,000-39,999; 6 = \$40,000-49,999; 7 = \$50,000-74,999;

8 = \$75,000 plus.

BLACK = l if woman is black and O otherwise.

YEARSDIV = years since the divorce.

NEWDIV = 1 if the divorce occurred since January 1978 and 0 otherwise. HUSCHD = 1 if ex-husband has other children to support and 0 otherwise.

= woman's estimate of her ex-husband's income in \$5,000 increments, HUSTNC

where I equals less than \$5000 and 6 equals \$25,000 plus.

= woman's current age (April 1979). AGE

AGES0 = AGE squared.

= 1 if woman has any children not fathered by her ex-husband and OTHERKID

O otherwise.

CSVOL = 1 if child support was agreed to voluntarily and 0 otherwise.

= dollars of child support due in 1978. CHSUPDUE

= dollars of child support received in 1978. CHSUPREC

= 1 if child support received regularly and 0 otherwise. **CSREGULR**

AWARDAL = l if alimony was awarded.

= 1 if child support due in 1978 and 0 otherwise. CHSUP78

PCCSDUE = CHSUPDUE/PATERNR.

= dollars of alimony due in 1978. ALIMDUE

= 1 if alimony is due in 1978 and 0 otherwise. ALIM78

= dollars of alimony received in 1978. ALIMREC

AFDCMAX = maximum monthly AFDC payments by state and number of children.

INLF79 = 1 if woman was working or looking for work in March 1979 and 0

otherwise.

KIDLT3 = number of children under 3 years old.

KIDLT6 = number of children under 6 years old.

KIDLT18 = number of children under 18 years old.

NADULT = number of adults in the household.

OTHFINC = total family income excluding child support received, alimony

received and public assistance income.



